UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
BIN C15700
Seattle, WA 98115-0070

Refer to:
OSB1999-0307-AM

May 16, 2002

Mr. Fred Patron
U.S. Department of Transportation
Federal Highway Administration
The Equitable Center, Suite 100
530 Center Street NE
Salem, OR 97301

Re: Amendment of the February 17, 2000, Biological Opinion (OSB1999-0307) on the Effects of Two Additional Scuppers to the South Yamhill River Bridge Project Administered by the Oregon Department of Transportation (ODOT) on Upper Willamette River Steelhead.

Dear Mr. Patron:

On March 15, 2002, Tom Loynes of National Marine Fisheries Service (NMFS) met on site at the South Yamhill River Bridge Project (Whiteson) Bridge Project with Oregon Department of Transportation (ODOT) environmental and project staff. The main purpose of the meeting was to discuss proposed changes to the project, assess additional effects resulting from the proposed changes, and develop solutions to offset these additional effects. The purpose of this letter is to identify the proposed changes and additional conservation measures as they amend NMFS' February 17, 2000, biological opinion (Opinion) (OSB1999-0307) "South Yamhill River (Whiteson) Bridge Replacement."

Changes in the Proposed Action and Conservation Measures.

The design in the original consultation called for a bridge replacement where the stormwater was curbed to the ends of the bridge and was routed into a storm detention sump allowing infiltration into a vegetated field. The latest design and the reason for reinitiation is the proposed addition of two scuppers on the bridge deck. Without these scuppers an unsafe highway condition could occur, resulting in surface water extending two feet out into the travel lanes. The addition of the scuppers and the water quality effects associated with them are outside the scope of the original consultation. ODOT has agreed to do the following to offset the impacts associated with the addition of the two scuppers:

- Create settling basins directly below the scuppers that will capture run-off and allow pollutants to settle out and infiltrate. The lower ends of these swales will be vegetated so that pollutants and sediment can be trapped in the vegetation. The water will then run into and infiltrate through a vegetated field. The stormwater discharge that drains through the scuppers does not have a pathway to flow directly to the South Yamhill River, except during high water events that may occur a few days out of the year. Both scuppers will have elongated rock splash basins beneath them. The runoff will be directed away from the bridge so it does not flow across the unvegetated ground beneath the structure, and instead flows across open, vegetated ground toward a large depression. The splash basins should trap larger sediments between the rocks, and should facilitate some limited infiltration. The flow path of the stormwater through vegetation should result in effective pollutant filtration.

- The stormwater from the south end of the bridge will flow through the drainage sump and then across a short (10 meter), shallow (15 centimeter) bio-swale along the roadfill before discharging onto riprap countersunk into a toe trench. This will allow some filtration by vegetation, and will facilitate infiltration into the soil at the riprap. This flat bottomed bio-swale will be vegetated and detain stormwater for periods of time allowing pollutants and suspended solids to settle out. The stormwater will then be allowed to infiltrate into a vegetated field.

Supplemental Analysis of Effects

The new Whiteson Bridge will require two scuppers that were not included in the original design or biological assessment. The concern is that the placement of the scuppers over the 2 year flood plain would result in an increase in pollutant loading reaching the South Yamhill River. The floodplain contains large natural depressions which fill with water, but do not have a direct outlet to the South Yamhill. While floodwaters do flow across this floodplain, receding water collects in the depressions and slowly infiltrates. In all but a few days out of the year runoff discharged through the scuppers will collect in the large depression that crosses directly under the bridge. The perennial cover of grass would provide filtration and trapping of pollutants carried in the highway runoff. Most of the fine sediment filtered out will remain immobilized and not be re-entrained during flood events.

The combination of floodplain characteristics and elements incorporated into the drainage swales below the scuppers and at the end of the bridge will substantially reduce the pollutant loading from highway runoff below the level that would normally be expected. During periods where the runoff infiltrates into the ground, dissolved pollutants, which might not otherwise be captured by ordinary vegetation filtration, will be trapped in the soil.

Conclusion

NMFS believes that the conservation measures described above, and agreed to by ODOT together with the natural elements of the floodplain, will prevent any additional adverse effects from the two proposed scuppers to be added to the bridge project. After reviewing the effects of the proposed actions amending the Opinion, it is NMFS' opinion that this project, as amended, is not likely to jeopardize the continued existence of the Upper Willamette River steelhead. The proposed conservation measures are adequate to minimize incidental take, therefore no additional terms and conditions are needed. NMFS also feels that the proposed conservation measures are adequate to protect essential fish habitat, and thus satisfy the Magnuson-Stevens Act consultation requirements.

Therefore, the February 17, 2000, Opinion is hereby amended to include the installation of the scuppers, splash basins and bio-swale.

I appreciate the interest you and your staff have in assuring we have a common understanding of our efforts. If you have further questions, please contact Tom Loynes at 503.231.6892 of my staff in the Oregon Habitat Branch.

Sincerely,

for D. Robert Lohn
Regional Administrator

cc: Rose Owens - ODOT
Greg Apke - ODOT
Molly Cary - ODOT
Bill Warneke - ODOT